

CONTROLLED RELEASE OF ANTI-ARRHYTHMIC AGENTS

ABSTRACT

Methods for the simple, reliable application and local controlled release of selected anti-arrhythmia drugs from a hydrogel applied to or polymerized on the tissues of the heart or its vessels, especially in conjunction with cardiac bypass or other cardiac surgery, have been developed. The anti-arrhythmia drugs are incorporated into hydrogels that biodegrade and adhere to the tissues to which the anti-arrhythmic drugs are to be delivered. The hydrogels may be formed *in vitro* or *in vivo*. In a preferred embodiment, the drugs are effective to lengthen atrial effective refractory period. A particularly preferred drug is amiodarone.